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52531 7590 07/08/2008 CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC 1420 FIFTH AVENUE			EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 09/801.848 KEITH, CHRISTOPHER Office Action Summary Examiner Art Unit KENNETH L. BARTLEY 3693 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 11 April 2008. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-99 and 109-124 is/are pending in the application. 4a) Of the above claim(s) 2-39 and 47-99 is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 1.40-46 and 109-124 is/are rejected. 7) Claim(s) _____ is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner, Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

Notice of References Cited (PTO-892)
 Notice of Draftsperson's Patent Drawing Review (PTO-948)

 \information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date 02/05/2005; 10/09/2006; 12/18/2006; 01/04/2008;
 04/11/2008; 06/20/2008

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
5) Notice of Informal Patent Application

6) Other: _____.

U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06)



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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 11, 2008 has been entered.

Response to Amendment

2. Claims 1, 40-43, 45-46, 109, 111-113, 115-117, 119-121, and 123-124 are currently amended. Claims 100-108 have been previously canceled. Claims 2-39 and 47-99 are withdrawn. Claims 1, 40-46, 109-124 are pending in the application and are provided to be examined upon their merits.

Response to Arguments

Applicant's arguments filed April 11, 2008 have been fully considered but they
are not persuasive. The Examiner provides a response to Applicant's remarks in **bold**helow

IDS request on page 19:

Applicant thanks the Examiner for the consideration given to the Information Disclosure Statements (IDSs) dated September 17, 2001; July 1, 2002; September 18, 2007; and October 9, 2007. The Office Action indicated that consideration would be given to the

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IDSs filed February 5, 2005; October 9, 2006; and December 18, 2006; however, initialed copies of those statements were not returned with the Office Action. Applicant requests the Examiner to provide initialed copies of the IDSs filed February 5, 2005; October 9, 2006; December 18, 2006, as well as the IDS filed January 4, 2008. An additional IDS is submitted herewith. Applicant thanks the Examiner for the consideration given to each of the references cited in the IDSs.

The Examiner provides the IDS's and thanks the Applicant.

Applicant cites 35 USC § 102(e) rejection, page 19:

In the Office Action, Claims 1, 40-46, and 109-124 were rejected under 35 U.S.C. § 102(e) as being anticipated by Korhammer et al. (US 6,278,982) (hereinafter "Korhammer"). Applicant respectfully traverses the rejection and requests reconsideration of the claims.

Applicant argues claim elements:

Korhammer does not teach or suggest a method of facilitating trading that comprises "operating an integrated computer system forming a platform on which multiple processes are executing" and "executing, during an overlapping time interval on the same platform, at least two market processes having respective market methodologies, wherein each of the market processes provides a distinct and separate market at which trades can be executed," as claimed in amended Claim 1. An example environment is illustrated in FIGURE 1 of the present application and in the corresponding text at page 4, line 5, to page 7, line 7, of the specification as filed.

Applicant is emphasizing: 1) integrated computer system multiple processes; and 2) executing during an overlapping time interval on the same platform.

The Examiner respectfully points out that Korhammer teaches a consolidating computer system (CCS):

"In this system, each customer uses a single application on a single trader terminal to view, and analyze security market information from and to conduct security transactions with two or more ECNs, or other comparable ATSs, alone or in combination with one or more electronic exchanges. A consolidating computer system ("CCS") supplies the market information and processes the transactions in the present system." (col. 4, lines 14-21)

Also, more than one market process:

"As seen in FIG. 2, the present invention eliminates the need for a separate terminal or application for each ECN and electronic exchange by use of CCS 100. The CCS performs a number of interrelated functions that may be carried out on one computer or a network of computers. In FIG. 2, the inter-relationships between the ECN's and the NASDAQ are the same as that of FIG. 1. However, rather than there being a number of individual

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terminals 11, 12 and 13 or applications, the CCS 100 collects orders from each ECN, (ECN150 and ECN251)and electronic exchanges (NASDAQ 52), distributes a composite order book to the customers according to each customer's memberships in the ECNs and rights to use an electronic exchange. Thus customer 10 may only receive a subset of the complete order book compiled by the CCS 100 corresponding to where the customer 10 is permissioned. In this example <u>customer 10 has access to ECN150 and ECN251 and NASDAQ 52</u>." (col. 6, lines 51-61) Therefore, different customers are able to access different market data, which requires the capability to execute during overlapping time periods. Also NASDAQ has it's respective market methodologies, as does ECN 150, for example.

Applicant continues on top of page 20:

At best, Korhammer teaches a securities trading system for consolidation of trading on multiple ECNs and electronic exchanges. According to Korhammer, a customer is allegedly able to use a single trader terminal to view, analyze, and conduct securities transactions with two or more ECNs, alone or in combination with one or more electronic exchanges. See, e.g., the Abstract of Korhammer. A consolidating computer system ("CCS") aggregates order book information from each participating ECN order book computer and electronic exchange. The combined information is displayed to the customer. See, e.g., Figure 2 of Korhammer.

Regarding the CCS of Korhammer:

"When a customer 10 wishes to place an order, he/she may use trading terminal 101 to send the order to the order server 211 which may use information from the analytical engine 206 to determine when and where to place the order, based on parameters indicated by the customer. For example, the order server 211, using information from analytical engine 206, could break up a single order, routing it to more than one ECN and/or electronic exchange." (col. 8, lines 39-46) Therefore, Korhammer is teaching an order server with an analytical engine that directs order placement to different markets.

Applicant continues on page 20, second paragraph:

Contrary to Claim 1, Korhammer teaches multiple different systems (ECNs and electronic exchanges), each of which is separately operated and executed on a different system using different protocols. Korhammer merely provides a "consolidation system" (Col. 4, lines 13-14) that communicates with each of the different ECNs and exchanges according to their native protocols and consolidates the market information into a single display for the user. Such a system is explicitly described in the present application at page 4, lines 15-18, where the application explains:

In conventional securities trading systems, the term "platform" usually indicates a system for mapping data from disparate data sources onto one or more display

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screens to aid in comprehension of the data by a securities trader. An objective of a conventional platform is to make it easier for the securities trader to communicate with disparate data sources.

The Examiner points to Korhammer:

"It is another object of the present invention to provide a means to translate the computer protocol of each ECN and electronic exchanges to a common protocol." (col. 3, lines 38-40) Therefore, Korhammer is not teaching execution on different system using different protocols but is teaching execution on a system that converts different protocols to a common protocol (also, Fig. 3, Ref. 200-202).

"Protocol converter 200 to 202 <u>not only convert data for display</u>, but upon an order being placed, <u>convert from the system protocol to the protocol necessary to enter or execute the order on the appropriate ECN or electronic exchange." (col. 7, lines 29-33) This provides the ability to execute orders for at least two market processes.</u>

Applicant reviews the system, starting bottom of page 20 of Remarks:

As to the subject matter of the present application, the application thereafter explains, at page 4, lines 18-22:

In contrast, as used herein and in the claims, the term "platform" indicates a computer system for supporting software processes that can exist independently of each other and that communicate with each other in a standardized manner. That is, the platform makes it easier for processes to communicate with each other.

Referring to the drawings in the present application, and in particular to FIGURE 1, there is illustrated a block diagram showing components that may be used with the present methodology. System 5 is a general purpose computer or network of computers that functions as a platform for allowing electronic liquidity finder (ELF) programs (otherwise referred to as trading processes) and umpire programs (market processes) to interact. As explained at page 4, lines 5-14, the platform of system 5 embodies a protocol for standardizing market trading methodologies, order representation and processing, and data formats. System 5 provides platform services 60 to the ELFs and umpires active within system 5. Platform services 60 includes, among other things, linked order execution manager 61, platform status monitor 62, contra-party preference updating 63, system status board 64C, market status board 65, broadcast services 66, and stop order manager 67.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., details of their computer platform, such as ELF programs) are not recited in the rejected claim(s). Although the claims are interpreted in

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light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*. 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

By operating an integrated computer system that forms a platform on which multiple processes are executing and simultaneously executing on the platform at least two market processes having respective market methodologies, as claimed in the present application, the complex communication and translation structures of Korhammer are not needed. In reference to Figure 2 of Korhammer, to the extent the Patent Office considers the consolidating computer system (CCS) 100 to constitute the "platform" claimed in Claim 1, and the ECNs 50, 51, 53, and 54 and the electronic exchange 52 to constitute the claimed "market processes," it is readily observed that the ECNs 50, 51, 53, and 54 and the electronic exchange 52 are not executing on the CCS 100. The ECNs 50, 51, 53, and 54 and the electronic exchange 52 are executing on different servers comprising different systems as illustrated by the separate dashed boxes referenced by the numerals 50, 51, 52, 53, and 54. The ECNs 50, 51, 53, and 54 and the electronic exchange 52 may communicate with the CCS 100, as illustrated by the arrowed lines in Figure 2, but this does not constitute executing the ECNs 50, 51, 53, and 54 and the electronic exchange 52 on the CCS 100. Nowhere does Korhammer suggest an integrated computer system forming a platform as claimed, on which at least two market processes having respective market methodologies are simultaneously executing.

As pointed out above, Korhammer provides an order server and analytical engine to break up an order and route it to a proper exchange, so a single order can be placed in different markets. Further, as pointed out above, CCS uses a common protocol. The Examiner respectfully maintains that this is executing on the same platform at least two market processes.

Applicant argues trading process at the bottom of page 21:

Korhammer also fails to teach or suggest "automatically enabling at least two trading processes to trade with each other at the markets provided by the market processes according to the respective market methodologies, wherein the trading processes are executing on the same platform as the market processes," as claimed in Claim 1.

From above regarding Korhammer:

"When a customer 10 wishes to place an order, he/she may use trading terminal 101 to send the order to the order server 211 which may use information from the analytical engine 206 to determine when and where to place the order, based on parameters indicated by the customer. For example, the order server 211, using information from analytical engine 206, could break up a single order, routing it to more than one ECN and/or electronic exchange." (col. 8, lines 39-46) This teaches at least two trading processes, where an order is either a buy or sell. These can be traded on different markets

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To the extent the Patent Office considers a process operating on the terminal 101 to be a "trading process" and the consolidating computer system (CCS)100 to be the claimed "platform," Korhammer nowhere describes the process of terminal 101 as executing on the CCS 100, much less "executing on the same platform as the market processes." Indeed, the terminal 101 uses the CCS 100 as a intermediary to translate communications with the ECNs 50. 51. 53. and 54 and the electronic exchange 52.

As pointed out above, execution takes place on the CCS. Further, the Examiner points out that the claims teach "...operating an integrated computer system forming a platform on which multiple processes are executing..." Korhammer teaches:

"The trading terminals, each participating ECN order book computer, each participating electronic exchange, and the CCS form a computer network. The ECNs' order book computers, the electronic exchanges' servers and the CCS may, in actuality, each be complex systems consisting of a number of computers and networks." (col. 4, lines 22-28) The Examiner considers a computer network to be an integrated computer system.

Applicant reviews dependent claims on page 22:

Applicant submits that Korhammer does not teach or suggest the elements recited in amended Claim 1 and therefore does not support a prima facie case of anticipation. Claim 1 should be allowed. Additionally, Claims 40-46 should be allowed, both for their dependence on Claim 1 and for the additional subject matter they recite, which includes:

 automatically maintaining a market process status file on the computer system forming the platform, wherein the market process status file includes a status of each of the market processes (Claim 40, as amended);

(Cited from Korhammer above)

Splitting up one order to different markets would require a status of each market process to know if/when order is placed.

• wherein the market process status file is accessible to at least one of the market processes (Claim 41, as amended);

Ability to place a trade in a market, converting from a system to market protocol.

- wherein the market process status file is accessible to at least one of the trading processes (Claim 42, as amended);
- Place an order, which is buy and/or sell.
- · checking an access permission for a trading process before providing the

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trading process with access to the market process status file (Claim 43, as amended):

"It is yet again an object of this invention to limit the information supplied from the ECNs to a customer of the present invention to only those ECNs and electronic exchanges where the customer is an ECN member or electronic exchange user." (col. 4, lines 3-7)

 automatically updating in the market process status file the status of at least one of the market processes that has changed its operational mode (Claim 44, as previously presented);

Presented below in claim rejections.

 wherein the operational mode is an in process mode in which the market process has priority over other market processes for executing a trade (Claim 45, as amended): and

Presented below in claim rejections.

 wherein the operational mode is a fast symbol mode in which a trade is available for execution without regard to the status of the trade as represented in a different market provided by another of the market processes (Claim 46, as amended).

Presented below in claim rejections.

The amendments to Claims 40-46 are supported in the original application, e.g., at page 11, lines 16-23; page 22, lines 18-26; and page 37, lines 14-28, among other places in the application as filed.

Applicant summarizes:

Claims 109-116 (system claims) and 117-124 (computer-accessible medium claims) have been amended similar to Claims 1 and 40-46, and should be allowed for reasons similar to those discussed above with respect to Claims 1 and 40-46. In view of the patentability of Claims 1, 40-46, and 109-124, applicant further requests rejoinder and allowance of withdrawn Claims 2-39 and 47-99.

Based on the above response, the Examiner respectfully maintains the prior rejections.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 5. Claims 1, 40-46, and 109-124 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,278,982 to Korhammer et al..

[Note that the analysis for the method claims (1, 40-46) also applies to the respective system claims (109-110) and product claims (117-124)]. Regarding claims 1, 109, and 117

(Claim 1) A method of facilitating trading comprising: operating an integrated computer system forming a platform on which multiple processes are executing:

Korhammer et al. discloses a platform for executing multiple processes: "In this system, each customer uses a single application on a single trader terminal to view, and analyze security market information from and to conduct security transactions with two or more ECNs, or other comparable ATSs, alone or in combination with one or more electronic exchanges. A consolidating computer system ("CCS") supplies the market information and processes the transactions in the present system." (col. 4, lines 14-21)

"The trading terminals, each participating ECN order book computer, each participating electronic exchange, and the CCS form a computer network. The ECNs' order book computers, the electronic exchanges' servers and the CCS may, in actuality, each be complex systems consisting of a number of computers and networks." (col. 4, lines 22-28) The Examiner considers a computer network to be an integrated computer system.

executing, during an overlapping time interval on the same platform at least two market processes having respective market methodologies, wherein each of the market processes provides a distinct and separate market at which trades can be executed, and

"These orders will be incorporated in the market data distributed by the CCS. The trading terminal can also execute buy or sell transactions

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against listed bids and offers, and by using the CCS place the order using the correct protocol for the relevant ECN or electronic exchange. (col. 4, lines 59-64). Also Fig. 2.

"As seen in FIG. 2, the present invention eliminates the need for a separate terminal or application for each ECN and electronic exchange by use of CCS 100. The CCS performs a number of interrelated functions that may be carried out on one computer or a network of computers. In FIG. 2, the inter-relationships between the ECN's and the NASDAQ are the same as that of FIG. 1. However, rather than there being a number of individual terminals 11, 12 and 13 or applications, the CCS 100 collects orders from each ECN, (ECN150 and ECN251)and electronic exchanges (NASDAQ 52). distributes a composite order book to the customers according to each customer's memberships in the ECNs and rights to use an electronic exchange. Thus customer 10 may only receive a subset of the complete order book compiled by the CCS 100 corresponding to where the customer 10 is permissioned. In this example customer 10 has access to ECN150 and ECN251 and NASDAQ 52." (col. 6. lines 51-61) Different customers are able to access different market data, which inherently requires the capability to execute during overlapping time periods. Also NASDAQ has it's respective market methodologies, as does ECN 150, for example.

automatically enabling at least two trading processes to trade with each other at the markets provided by the market processes according to the respective market methodologies, wherein the trading processes are executing on the same platform as the market processes.

"...conduct security transactions with two or more ECNs, or other comparable ATSs, alone or in combination with one or more electronic exchanges. (col. 4, lines 16-20)

"When a customer 10 wishes to place an order, he/she may use trading terminal 101 to send the order to the order server 211 which may use information from the analytical engine 206 to determine when and where to place the order, based on parameters indicated by the customer. For example, the order server 211, using information from analytical engine 206, could break up a single order, routing it to more than one ECN and/or electronic exchange." (col. 8, lines 39-46)

"If there is no destination specified, then the CCS determines whether it is a market order or a limit order 405. If it is a limit order, analytic engine 206 is used to determine the best destination, taking into account only those ECNs and electronic exchanges of which customer 10 is a member 406. The CCS 100 then routes the order to the appropriate destination 404." (col. 12. lines 1-7)

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Regarding claims 40, 110, and 118:

40. The method of claim 1, further comprising automatically maintaining a market process status file on the computer system forming the platform, wherein the market processes status file includes a status of each of the market processes.

Korhammer et al. teaches:

"The <u>CCS aggregates order book information</u> from each participating ECN order book computer including security, order identification, and bid/offer price information." (col. 4, lines 28-31)

Regarding claims 41, 111, and 119:

(claim 41) The method of claim 40, wherein the market process status file is accessible to at least one of the market processes.

Korhammer et al. teaches:

"The trading terminal both displays the market information provided to it by the CCS and allows the customer to place bid and/or offer orders and route them through the CCS to any ECN or electronic exchange for which the customer is permissioned. These orders will be incorporated in the market data distributed by the CCS." (col. 4., lines 55-60)

Regarding claims 42, 112, and 120:

(claim 42) The method of claim 40, wherein the market process status file is accessible to at least one of the trading processes.

Korhammer et al. teaches:

"The trading terminal both displays the market information provided to it by the CCS and allows the customer to place bid and/or offer orders and route them through the CCS to any ECN or electronic exchange for which the customer is permissioned. These orders will be incorporated in the market data distributed by the CCS." (col. 4., lines 55-60)

Regarding claims 43, 113, and 121:

(claim 43) The method of claim 42, further comprising checking an access permission for a trading process before providing the trading process with access to the market process status file.

Korhammer et al. teaches:

"If, however, customer were only a member of ECN251 and NASDAQ, the CCS 100 would not provide order book information from ECN150, metric calculations based on information from ECN150, or execute any orders to ECN150." (col. 6, line 67 and col. 7, lines 1-5)

"It is yet again an object of this invention to limit the information supplied from the ECNs to a customer of the present invention to only those ECNs and electronic exchanges where the customer is an ECN member or electronic exchange user." (col. 4, lines 3-7)

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Regarding claims 44, 114, and 122:

(claim 44) The method of claim 40, further comprising automatically updating in the market process status file the status of at least one of the market processes that has changed its operational mode.

Korhammer et al. discloses:

"If it is a new order, the CCS 100 adds to the master order book the new order and then sorts the order book by price and other factors for a given security 302. If it is not a new order, the computer then determines whether it is a delete order 303. If it is a delete order, the computer removes the order from the master order book 304." (col. 9, lines 37-42) In this way, an order can be changed (from limit to market order for example) and the order book is updated.

Regarding claims 45, 115, and 123:

(claim 45) The method of claim 44, wherein the operational mode is an in process mode in which the market process has priority over other market processes for executing a trade.

Korhammer et al. discloses a limit order:

"The customer also specifies the number of shares it wishes to purchase at space 602 and the price at which he/she wishes to purchase at 603." (col. 10, lines 6-8)

Regarding claims 46, 116, and 124:

(claim 46) The method of claim 44, wherein the operational mode is a fast symbol mode in which a trade is available for execution without regard to the status of the trade as represented in a different market provided by another of the market processes.

Korhammer et al. teaches a market order, where order execution would be immediate:

"If no price is indicated, this is a market order, that is the user is willing to buy the security at the best available price." (col. 10, lines 8-10)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KENNETH L. BARTLEY whose telephone number is (571)272-5230. The examiner can normally be reached on Monday through Friday, 8:00 - 5:00 FST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jagdish Patel can be reached on (571) 272-6748. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAGDISH N PATEL/ Primary Examiner, Art Unit 3693